

Another day, we left the base camp for Marei-Parei. After two hours' walk on the second day, we found Nepenthes tentaculata and knew we were already in the Nepenthes zone. Later, Nepenthes rajah was found. In a sunny wet boggy area N. edwardtiana was seen. Three hours after we left the first camp we arrived at Marei-Parei, alt. 1828 m. There was the biggest population of Nepenthes rajah (800 m²) I have ever seen. Thousands of seedlings of N. rajah were there. There was also a good population of Drosera spathulata. It was the shortest day in my whole life when I found Nepenthes rajah. Readers might understand my feeling for a time when I found something new that I wanted if you have had similar experiences to this.

SPECIAL NOTICES

JAPANESE CARNIVOROUS PLANT BOOKS

The following books were written in Japanese on the subject of carnivorous plants. These books can be ordered from our offices by sending in your check or money order made out to J. A. Mazrimas before March 1, 1973. I will order the books at that time and there may be a delay of two months or more before you receive your books. The books have pictures in black and white and color as well as line sketches, many captions being in standard Latin nomenclature as well as Japanese.

| <u>Author</u> | <u>Title</u> | <u>Pages</u> | <u>Price*</u> |
|---------------|---|--------------|---------------|
| 1. Shimizu | Insectivorous Plants (Photo. Illust.) | 154 | \$9.00 |
| 2. Suzuki | Insectivorous Plants (Cult. and Collect.) | 168 | \$1.80 |
| 3. Kasahara | The Wonder of Insect. Plts. | 242 | \$1.25 |
| 4. ----- | <u>Aldrovanda vesiculosa</u> at Hanyu-city | 32 | \$2.10 |
| 5. ----- | "New Flower" Magazine (Special edition) | 86 | \$1.20 |
| 6. Komiya | Systematic Studies on Lentibulariaceae (English) | 124 | \$7.60 |

*Price includes overseas and domestic postage and represents cost only.

NORMAN LEFKOVITZ (617 Treeside Drive, Akron, Ohio 44313) would like to directly communicate with anyone who is or has grown carnivorous plants under artificial lights, or who is interested in doing so. Norman is gathering quite an experience in this area.

RECENT LITERATURE

Amagase, S.: Digestive enzymes in insectivorous plants. III. Acid proteases in the genus Nepenthes and Drosera peltata. Jour. Biochem. 72. pp. 73-81 1972
Nepenthes crude secretions had four proteases, the purified extracts one, the latter similar in electrophoretic mobility to the purified extract of D. peltata. Characterizations with pH

and temperature variations and use of inhibitors were made. The site of peptide bond splitting was also determined and was the same for the purified extracts from both plants.

Amagase, S., Mori, M., and Nakayama, S.: Digestive enzymes in insectivorous plants. IV. Enzymatic digestion of insects by Nepenthes secretion and chitinolytic activities. Journ. Biochem. 72. pp. 765-767 1972

The authors purified and studied the properties of acid proteases from the secretion of Nepenthes and an extract of Drosera peltata. They also demonstrated a chitinase enzyme which solubilizes the external skeleton of ants and other insects. At the present time, it was not established if the latter enzyme is formed by the plant or by some symbiotic microorganism living in the Nepenthes fluid.

Darling, Thomas, Jr. and Shetler, S. G.: Sarracenia x catesbaei Elliott (pro. sp.) in the Pocono Mountains of Pennsylvania. Castanea 37 (2). pp. 133-137 1972

Four separate instances of apparent spontaneous hybridization between the native Sarracenia purpurea L. and introduced S. flava L. at Bear Lake in Lackawanna County, Pennsylvania, are described. This hybrid has been known for a long time under the name S. catesbaei Elliott.

Kondo, K.: A paper chromatographic comparison of Utricularia cornuta and U. juncea. Phytion 30 (1/2) pp. 43-45 1972

Although many of the constituents are common to both Utricularia cornuta or U. juncea, certain spots are found only in U. cornuta or U. juncea. Paper chromatographic observations lend support to the conclusion that U. cornuta and U. juncea are quite closely related to each other but still are separate species.

Kondo, K.: Chromosome numbers of some angiosperms in the United States. II. Phytion 30 (1/2) pp. 47-51 1972

Among new chromosome number counts of ten species, four species of Utricularia were reported for the first time: Utricularia biflora (n=14), Utricularia fibrosa (2n=28), Utricularia gibba subsp. gibba (n=14), Utricularia radiata (n=14). Since U. radiata is taxonomically closely related to U. inflata it is sometimes called U. inflata var. minor. Studies by Reinert and Godfrey (1962) indicated that the taxa were biosystematically distinct. Indeed they are, for the chromosome numbers of the species are different: n=9 or 2n=18 and 36 for U. inflata (Lewis, et al., 1962), n=14 for U. radiata.

Ragetli, H. W. J., Weintraub, M., Lo, E.: Characteristics of Drosera tentacles. I. Anatomical and cytological detail. Can. J. Bot. 50 (1). pp. 159-168 1972

Distinct features on the surface and inner structure of the tentacle were described in detail which could explain the various functions carried out by this complicated organ. The transport of metabolites,